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	Salate for John 14-37 10	Application Number	10/716,369			
	FORMATION DISCLOS	Filing Date	November 18, 2003			
		First Named Inventor	BANEY et al.			
S	TATEMENT BY APPLICA	ANT Art Unit	1755			
	(Use as many sheets as necessary)	Examiner Name				
Sheet	1 of 1	Attorney Docket Number	5853-464			

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
m		US- 4,540,803	09/10/1985	Cannady	
 		US- 4,987,201	01/22/1991	Riccitiello et al.	
		US- 5,030,744	07/09/1991	Funayama et al.	
		US- 5,169,908	12/08/1992	Zank	
1		US- _{6,242,626}	06/05/2001	Eiling et al.	
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		FOREIGN	N PATENT DOCU	MENTS	-	
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Commission to term 1445.			Application Number	10/716,369		
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Sheet 1	of	3	Attorney Docket Number	5853-464		

	_	NON PATENT LITERATURE DOCUMENTS	
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M		WEINMANN et al., "Boron-containing polysilylcarbodi-imides: a new class of molecular precursors for Si-B-C-N ceramics," Journal of Organometallic Chemistry, 541:345-353, 1997.	
		RIEDEL et al., "A silicoboron carbonitride ceramic stable to 2,000C," Nature, 382:796-798, 1996.	
		WEINMANN et al., "Synthesis and Thermal Behavior of Novel Si-B-C-N Ceramic Precursors," Chem. Mater., 12:623-632, 2000.	
		BILL et al., "Precursor-derived Si-(B-)C-N ceramics: thermolysis, amorphous state and crystallization," Applied Organometallic Chemistry, 15:777-793, 2001.	
		VENKATESWARA et al., "Effect of precursors, methylation agents and solvents on the physicochemical properties of silica aerogels prepared by atmospheric pressure drying method," Journal of Non-Crystalline Solids, 296:165-171, 2001.	
		SCHUHMACHER et al., "Solid-state NMR and FT IR studies of the preparation of Si-B-C-N ceramics from boron-modified polysilazanes," Applied Organometallic Chemistry, 15:809-819, 2001.	
		BANEY et al., "Methylchloropolysilanes and Derivatives Prepared from the Redistribution of Methylchlorodisilanes," Organometallics, 2:859-864, 1983.	
		CHOONG et al., "Silicon Carbonitride from Polymeric Precursors: Thermal Cross-Linking and Pyrolysis of Oligosilazane Model Compunds," Chem. Mater., 4:141-146, 1992.	
		FUNAYAMA et al., "Synthesis of a Polyborosilazane and Its Conversion into Inorganic Compounds," J. Am. Ceram. Soc., 76:717-723, 1993.	
		WIDEMAN et al., "Reactions of Monofunctional Boranes with Hydridopolysilazane: Synthesis, Characterization, and Ceramic Conversion Reactions of New Processible Precursors to SiNCB Ceramic Materials," Chem. Mater. 9:2218-2230, 1997.	

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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
Mr)	GERVAIS et al., "Sol-Gel-Derived Silicon-Boron Oxycarbide Glasses Containing Mixed Silicon Oxycarbide (SiCxO4-x) and Boron Oxycarbide (BCyO3-y) Units," 84:2160-2164, 2001.	
		LI et al., "Preparation of Si-C-N-Fe magnetic ceramics from iron-containing polysilazane," Applied Organometallic Chemistry, 17:120-126, 2003.	·
1	,	WIDEMAN et al., "Boron-modified Polysilycarbodi-imides as Precursors for Si-B-C-N Ceramics: Synthesis, Plastic-forming and High-temperature Behavior," Appl. Oranometal. Chem., 12:725-734, 1998.	
		WAN et al., "Effect of Ammonia Treatment on the Crystallization of Amorphous Silicon-Carbon-Nitrogen Ceramics Derived from Polymer Precursor Pyrolysis," J. Am. Ceram. Soc., 85:554-564, 2002.	
i i i		SU et al., "Synthesis, Characterization, and Ceramic Conversion Reactions of Borazine-Modified Hydridopolysilazanes: New Polymeric Precursors to SiNCB Ceramic Composites," Chem. Mater., 5:547-556, 1993.	
		FUNAYAMA et al., "Conversion mechanism of polyborosilazane into silicon nitride-based ceramics," Journal of Materials Science, 30:410-416, 1995.	
<u> </u>		CINIBULK et al., "Characterization of Oxidized Polymer-Derived SiBCN Fibers," J. Am. Ceram. Soc., 84:2197-2202, 2001.	
		MULLER et al., "Short-Range Ordering in Amorphous Si3B3N7 As Determined by Multinuclear NMR Spectroscopy," Chem. Mater., 12:2341-2346, 2000.	
		SCHUHMACHER et al., "Solid-state NMR and FT IR studies of the preparation of Si-B-C-N ceramics from boron-modified polysilazanes," Appl. Organometal. Chem., 15:809-819, 2001.	
		WIDEMAN et al., "Synthesis, Characterization, and Ceramic Conversion Reactions of Borazine/Silazane Copolymers: New Polymeric Precursors to SiNCB Ceramics," Chem. Mater., 7:2203-2212, 1995.	

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Sheet	3	of	3	Attorney Docket Number	5853-464		

		NON PATENT LITERATURE DOCUMENTS						
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Mm		JESCHKE et al., "A magnetic resonance study on the structure of amorphous networks in the Si-B-N(-C) system," Journal of Non-Crystalline Solids, 260:216-227, 1999.						
		ADHYARU et al., "Solid-state cross-polarization magic angle spinning 13Cand 15N NMR characterization of Sepia melanin, Sepia melanin free acid and Human hair melanin in comparison with several model compounds," Magnetic Resonance in Chemistry, 41:466-474, 2003.						
		BRENDLER et al., "15N CP/MAS NMR as an instrument in structure investigations of organosilicon polymers," Fresenius J. Anal. Chem., 363:185-188, 1999.						
		WANG et al., "Novel Silicon-Boron-Carbon-Nitrogen Materials Thermally Stable up to 2200C," J. Am. Ceram. Soc., 84:2179-2183, 2001.						
		WIDEMAN et al., "Second-Generation Polymeric Precursors for BN and SiNCB Ceramic Materials," Appl. Organometal. Chem., 12:681-693, 1998.						
		TOREKI et al., "POLYMER-DERIVED SILICON CARBIDE FIBERS WITH LOW OXYGEN CONTENT AND IMPROVED THERMOMECHANICAL STABILITY," Composites Science and Technology, 51:145-159, 1994.						
		SRIVASTAVA et al., "Synthesis of Silylborazines and Their Utilization as Precursors to Silicon-Containing Boron Nitride," Eur. J. Inorg. Chem., 855-859, 1998.						
		IWAMOTO et al., "Crystallization Behavior of Amorphous Silicon Carbonitride Ceramics Derived from Organometallic Precursors," J. Am. Ceram. Soc., 84:2170-2178, 2001.						
		JALOWIECKI et al., "Interface characterization of nanosized B-doped Si3N4/SiC ceramics," Composites Part A, 27A:717-721, 1996.						
	HERMANN et al., "Structure and Electronic Transport Properties of Si-(B)-C Ceramics," J. Am. Ceram. Soc., 84:2260-2264, 2001.							

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